

Final

FOCUS REPORT New Chemicals Program

PART I: BACKGROUND

Written By: TKP

FOCUS DATE: 2/2/2006

FOCUS CHAIR: G. Hilton

COMPANY: [REDACTED]

CASE NUMBER(S): P06-0247 through and

PART II: SAT RESULTS

HEALTH: 1-2 ECOTOX: 3 OCCUPATIONAL EXPOSURE: 1B CONSUMER EXPOSURE: 3 ENVIRONMENTAL RELEASES: 3

ADDITIONAL SAT
INFORMATION:

PART III: OTHER FACTORS

- a. PRODUCTION VOLUME: [REDACTED] kg/yr
- b. PROD VOL OTHER:
- c. USE: [REDACTED]
- d. REGULATORY HISTORY: [REDACTED] SUSP/PNDG NEGOTIATION VOL TEST
EXPOSURE-BASED
[REDACTED] WITHDRAWN - OTHER
[REDACTED] TR 2ND DISPO DROP/VOL TESTING
[REDACTED] REG NON 5E SNUR
- e. TEST DATA:
- f. IMPORTED ☐ MANUFACTURED ☒ BOTH ☐
- g. MSDS: ☒
- h. CATEGORY: [REDACTED] CATEGORY 2:

PART IV: SUMMARY OF SAT ASSESSMENT

CASE NUMBER: P06-0247

FATE: [REDACTED]

liquid with mp < 20 C (P)

S = dispersible (P)

vp < 1.0E-6 mm Hg or torr at 20 C (P)

bp > 500 C (P)

H < 1.0E-8 (P)

log Koc > 4.5 (P)

log fish BCF = 0.50 (P)

sorption to sludge = low to moderate (P)

submitted test data for aerobic biodegradation were:

10% biodegradation in 30 d via CO2 evolution, thus, not readily biodegradable by the modified Sturm
CO2 evolution test (OECD301B)

POTW removal = 25 to 50% via sorption and possible partial biodegradation

time for complete ultimate aerobic biodegradation = months

sorption to soils and sediments = low to moderate

PBT Potential: P2B1T1

HEALTH: Absorption is poor from the skin, moderate from the GI tract, and good from the lung based on analogs;

concern for lung toxicity and irritation to eyes, skin, mucous membranes based on the surfactant



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properties of the PMN;

low to moderate concern for toxicity

ECOTOX: The toxicity profile for [REDACTED] is with ECs in mg/L (ppm), predicted (P), and measured (M):

[REDACTED]

liquid

S = dispersible

aerobic biodegradation was 10% CO₂ in 30 d by the Modified Sturm;

ECOTOX: Predicted (P) and measured (M) toxicity values in mg/L (ppm) are:

fish 96-h LC50 = < 0.200 P

fish (FHM) 96-h LC50 = 0.560 M S,N

daphnid 48-h LC50 = < 0.200 P

daphnid 48-h LC50 = 0.880 M S,N

green algal 96-h EC50 = < 0.200 P

green algal 96-h EC50 = 0.050 M S,N

fish chronic value = < 0.020 P SAR

fish ChV = 0.060 P FHM96/ACR10

daphnid ChV = < 0.020 P SAR

daphnid ChV = 0.090 P D48/ACR10

algal ChV = < 0.020 P SAR

algal ChV = 0.030 M S,N

Predictions are based on SARs for [REDACTED]

[REDACTED]; pH7; effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <180.0 mg/L as CaCO₃; and TOC <2.0 mg/L;

high concern based on SAR;

high concern based on test data;

assessment factor (AsF) = 10.0

CC for fish = 0.006 mg/L

CC for daphnids = 0.009 mg/L

CC for green algae = 0.003 mg/L

PART V: SUMMARY OF EXPOSURE/RELEASE

Manu:

[REDACTED]

Fate:

SWC: 3254.36 ppb

DW:LADD: 7.32e-5 mg/kg/d, ADD: 1.83e-4 mg/kg/d, ADR: 0.16 mg/kg/d

>COC (2 ppb): 9 of [REDACTED]

Fate:

SWC: 5215.58 ppb

DW:LADD: 2.20e-4 mg/kg/d, ADD: 5.51e-4 mg/kg/d, ADR: 0.26 mg/kg/d

>COC (2 ppb): 9 of [REDACTED]

Fate: [REDACTED]
LADD: 2.81e-4 mg/kg/d, ADD: 7.02e-4 mg/kg/d

Proc/Use: [REDACTED]

PART VI: FOCUS DECISION AND RATIONALE

DISPOSITION: Category-5(e) Ban Pend.UF Test

RATIONALE: P06-0247 will be regulated under TSCA 5(e) Category (Neutral Organics) Ban Pending Up-Front testing under the risk based authority for eco concerns. Potential risks to human health were addressed by negligible inhalation exposures and adequate dermal protection. Potential acute risks to the environment are from releases to water where the 2 ppb COC was exceeded for 9 out of [REDACTED] [REDACTED] (SWC: 3254.36 ppb), and 9 out of [REDACTED] from [REDACTED] (SWC: 5215.58 ppb). Eco testing will be the base set, flow through method with measured concentrations. No fate testing was requested.

PART VII: CCD DISPOSITION / DD

CCD:

STRUCTURE ACTIVITY TEAM REPORT

ver. 04/98

Case #: P-06-0247

DCN:

SAT Date: 1/27/06

SAT Chair: V. Nabholz

Submitter:

Chemical Name:

CAS RN:

Trade Name:

Structure

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None

Molecular Formula:

Molecular Wt.

WT%<500:

WT%<1000:

MP:

BP:

> 500

Eq. Wt:

H2O Sol (g/L):

Dispersible v.p.

< 0.000001

Max. Prod. Volume (kg/yr):

Physical State:

Liquid

USE:

Corrosion control in oil and gas wells and oil and gas pipe lines.

Analog:

Amine FGEW =

Related Case Numbers

Case Role

Related Case Numbers

Case Role

Focus

Date:

2-2-06

Results:

512061 End

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5 0 1 0 0 0 0 3 2 1 8

27 January 2006

RELATED CASES:

ANALOGS :

TYPE OF CONCERN:

HEALTH

ECOTOX

LEVEL OF CONCERN:

1-2

3

KEYWORDS: LUNG, IRR-E, S, MM, AQUATOX-A, C

FATE:

liquid with mp < 20 C (P)

S = dispersible (P)

vp < 1.0E-6 mm Hg or torr at 20 C (P)

$$bp > 500 \text{ C (P)}$$
$$H < 1.0E-8 \quad (P)$$
$$\log K_{oc} > 4.5 \quad (P)$$
$$\log \text{ fish BCF} = 0.50 \text{ (P)}$$

sorption to sludge = low to moderate (P)

submitted test data for aerobic biodegradation were:

10% biodegradation in 30 d via CO₂ evolution, thus, not readily biodegradable by the modified Sturm CO₂ evolution test (OECD301B)

POTW removal = 25 to 50% via sorption and possible partial biodegradation

time for complete ultimate aerobic biodegradation = months

sorption to soils and sediments = low to moderate

PBT Potential: P2B1T1

*CEB FATE: migration to ground water = moderate to rapid

HEALTH: Absorption is poor from the skin, moderate from the GI tract, and good from the lung based on analogs;

concern for lung toxicity and irritation to eyes, skin, mucous membranes based on the surfactant properties of the PMN;

low to moderate concern for toxicity

*CEB HEALTH: Exposures to humans: inhalation, dermal;

ECOTOX: The toxicity profile for [REDACTED] is with ECs in mg/L (ppm), predicted (P), and measured (M):

liquid

S = dispersible

aerobic biodegradation was 10% CO₂ in 30 d by the Modified Sturm;

ECOTOX: Predicted (P) and measured (M) toxicity values in mg/L (ppm) are:

fish 96-h LC50	=<	0.200	P
fish (FHM) 96-h LC50	=	0.560	M S,N
daphnid 48-h LC50	=<	0.200	P
daphnid 48-h LC50	=	0.880	M S,N
green algal 96-h EC50	=<	0.200	P
green algal 96-h EC50	=	0.050	M S,N
fish chronic value	=<	0.020	P SAR
fish ChV	=	0.060	P FHM96/ACR10
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daphnid ChV	=	0.090	P D48/ACR10
algal ChV	=<	0.020	P SAR
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Predictions are based on SARs for

pH7; effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <180.0 mg/L as CaCO₃; and TOC <2.0 mg/L;

high concern based on SAR;

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assessment factor (AsF) = 10.0

CC for fish = 0.006 mg/L

CC for daphnids = 0.009 mg/L

CC for green algae = 0.003 mg/L

*CEB ECOTOX: All releases to surface waters with CC = 2 ppb.

SAT co-chair: Vince Nabholz, 564.8909

NCSAB SAT REPORT

PMN: P-06-0247

CAS RN:

Chemical Name:

Analog:

Production Volume:

Structure:

16 Dec 1997

Use:

Corrosion control in oil and gas wells and oil and gas pipe lines.

Analog:

Formula:

Eq Wt:

Mol Weight:

Wt% < 500:

Wt% < 1000:

MP:

BP:

> 500

VP:

< 0.000001

H₂O Sol (g/L):

Dispersible Physical State:

Liquid

Log P:

Endpoint (mg/L)

Est. Value

Meas. Value

Comments

Fish 96-h

Daphnid 48-h

Algal 96-h

Fish ChV

Daphnid ChV

Algal ChV

BCF

CHEMICAL CLASS:

SAR:

ECOTOX CONCERN

H

M

L

CONCERN CONCENTRATION

DATE

ASSESSOR:

OPPT STRUCTURE ACTIVITY TEAM (SAT) MEETING

DATE JAN 27 2006

ATTENDEES

SIGNATURE

CHEMISTRY

___ Paul Bickart
___ Diana Darling
___ Rich Engler
___ Greg Fritz
___ Daniel Lin
✓ Kathy Schechter

Kathy Schechter

ENVIRONMENTAL FATE

___ Bob Boethling
___ Wen-Hsiung Lee
___ Laurence Libelo
___ David Lynch
___ Andy Mamantov

MEMO

HEALTH

___ Katherine Anitole
✓ Michael Cimino
✓ Leonard Keifer
✓ David Lai
✓ Jim Murphy
___ Deborah Norris
✓ Ronald Ward
___ Yin Tak Woo

MEMO

ENVIRONMENTAL EFFECTS

✓ Gordon Cash
___ Vince Nabholz
___ Maggie Wilson

Gordon Cash

SAT CHAIR/OTHER

___ Rebecca Jones
___ Leonard Keifer
✓ Vince Nabholz
✓ Jim Kwiat
___ Princess Campbell

